REMARKS

Claim 40 has been canceled without prejudice or disclaimer as to the subject matter recited therein. In addition, claims 22, 23, 30-32, 36, and 37 have been amended, and claim 41 has been added. Further consideration and examination of the presently claimed application are respectfully requested.

Objection to the Claims

An objection was lodged against claims 22, 23, 30, and 31 for lacking proper antecedent basis. In response thereto, claims 22, 23, 30, and 31 have been amended in a manner believed to correct the antecedent basis. Accordingly, Applicants respectfully request removal of this objection.

Section 112 Rejection

Claims 32-40 were rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. In response thereto, claim 32 has been amended in a manner believed to be supported by the specification. Claims 37 and 40 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. In response thereto, claim 37 has been amended in a manner believed to point out and distinctly claim the subject matter of the invention. In addition, claim 40 has been canceled rendering rejection thereto moot. Accordingly, Applicants respectfully request removal of this rejection.

Section 103 Rejection

The prior art rejections in paragraphs 7-14 of the Office Action were under 35 U.S.C. § 103(a) as being unpatentable over a combination of U.S. Patent No. 5,056,106 to Wang et al. (hereinafter "Wang"), U.S. Patent No. 5,270,936 to Fukushima et al. (hereinafter "Fukushima"), JP 3-134715 to Takahata et al. (hereinafter "Takahata"), and various secondary references, e.g., U.S. Patent No. 5,326,095 to Dudley (hereinafter "Dudley"), U.S. Patent No. 5,664,948 to Dimitriadis et al. (hereinafter "Dimitriadis"), "GPS: A Guide to the Next Utility," by Hurn (hereinafter "Hurn"), and "RTCM Recommended Standards for Differential NAVSTAR GPS Service" (hereinafter "RTCM").

Submitted herewith is a Declaration under 37 CFR 1.131 swearing behind Dimitriadis. Therefore, the rejection raised in paragraphs 11-14 of the Office Action have been obviated. The Declaration evidences conception of the applicable subject matter prior to October 11, 1994 — the effective date of Dimitriadis — with diligence until filing on December 30, 1994.

Also submitted is a Declaration under 37 CFR 1.131 swearing behind Takahata. Therefore, the rejections raised in paragraphs 7-14 of the Office Action have been traversed. Conception of the applicable subject matter was before the June 7, 1991 effective date of Takahata. The Declaration sets forth the diligence or excusable delay until filing on December 10, 1991. The excusable delay was primarily associated with a call to active duty in the military.

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. As stated in MPEP 2143.01, the fact that references can be hypothetically combined or modified is not sufficient to establish a prima facie case of obviousness. See In re Mills, 916 F.2d. 680 (Fed. Cir. 1990). Finally, the prior art reference or references when combined must teach or suggest all the claim limitations. In re Dembiczak, 175 F.3d 994, 999, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999); In re Dance, 160 F.3d 1339, 1343, 343, 48 U.S.P.Q.2d 1635, 1637 (Fed. Cir. 1998) ("To establish a prima face case of obviousness based on a combination of the content of various references, there must be some teaching, suggestion or motivation in the prior art to make the specific combination that was made by the applicant.") See also, MPEP 2143.03. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed Cir. 1991); MPEP 2143; In re Rouffet, 149 F.3d 1350, 47 U.S.P.Q.2d 1453 (Fed. Cir. 1998) ("When a rejection depends on a combination or prior art references, there must be some teaching, suggestion or motivation to combine the references."); Karsten Manufacturing Corporation v. Cleveland Golf Company, 242 F.3d 1376, 1385, 58 U.S.P.Q.2d 1286 (Fed. Cir. 2001):

In holding an invention obvious in view of a combination of references, there must be some suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to select the references and combine them in the way that would produce the claimed invention.

The motivation to combine prior art references most often comes from the references themselves and must be clear. In particular, broad conclusory statements are not evidence of a motivation to combine. Brown & Williamson Tobacco Corp. v. Phillip Morris, Inc., 229 F.3d 1120, 1125, 56 U.S.P.Q.2d 1456 (Fed. Cir. 2000). Regardless of the source, there must be some evidence of a motivation to combine. In re Dembiczak, 175 F.3 at 999 ("The range of sources available, however, does not diminish the requirement for actual evidence. That is, the showing must be clear and particular.")

First, there is no suggestion in Wang et al. (A-9) to make the proposed combination. Wang is relevant only to show a golf positioning system based on fixed radio transmitter triangulation. Wang describes a golf course with a plurality of transmitters broadcasting a spread spectrum ranging signal. When Wang et al. was filed – August 2, 1990 – GPS was known, although GPS was not operational and very expensive. There is no suggestion of GPS in Wang et al., and there is no motivation to do so. Wang et al. describes its own positioning and ranging scheme. Dudley is also inapposite, as it operates on a dissimilar principle based on proximity to buried tags.

Of course, if the proposed modification or combination would change the principle of operation, then the references are not sufficient to render the claims prima facie obvious. See, In re Ratti, 270 F.2d 810, 813, 123 U.S.P.Q. 349 (CCPA 1959). The operating principle of Wang is based on ranging signals from ground-based transmitters. The Examiner apparently conceded that Wang and Fukushima operate on different principles. In response to appellant's argument that there is no motivation to combine Wang and Fukushima, the Examiner simply demurred: "That the signals of the ground based radio broadcast are incompatible with GPS is irrelevant" (A-14, p. 6) The opposite is true. Dudley operated to display information to a golfer based on proximity to a buried tag – i.e., Dudley does not determine a position. The Examiner conceded the point, but alleged that "Dudley is cited for its teaching of the desirability of transmitting advertisements to golfers at selected positions and not specifically to its position determination methods." (A-14, p.7) What the Examiner failed to recognize is that use of fixed radio towers (Wang) or proximity (Dudley) would change the operating principle of the claimed invention. Because the operating principle is part of the claims, the proposed combination does not meet the claim limitations. The rejection was thus in error.

Second, there is no reasonable expectation of success in view of the teachings of Wang. This reference teaches only ground-based spread spectrum ranging signals that are alleged to be highly accurate. Indeed, there is no need to provide error corrections such as described and claimed in the present application. (A-3, claims 21-26) The primary errors in GPS include intentional degradation (SA),

ionospheric, multipath, atmospheric, clock, etc. These errors are not present in Wang et al. (although other errors exist). Indeed, Wang et al. (A-9, col. 3, lines 43-50) claims it is highly accurate, presumably eliminating any need for accuracy enhancement (e.g. error corrected) as called for in claims 21-26.

Finally, the claim limitations are not taught or suggested by the proposed combination. Again, Wang et al. teaches only the desirability of a using an electronic aid for distance determinations and positioning on the golf course and a radio tower ranging and triangulation solution. As such, at most Wang et al. describes a problem searching for a solution.

CONCLUSION

This response constitutes a complete response to the Office Action mailed September 17, 2004. If the Examiner has any questions, comments, or suggestions, the undersigned earnestly requests a telephone conference.

PETITION UNDER 37 C.F.R. § 1.136 FOR EXTENSION OF TIME

Applicant respectfully petitions the Commissioner for a two month extension of time under 37 C.F.R. § 1.136 within which to respond to the Office Action mailed September 17, 2004, such extension allowing the undersigned until February 17, 2005 to respond.

The Commissioner is authorized to charge the required fees or credit any overpayment to Daffer McDaniel, LLP deposit account no. 50-3268/5863-00203.

2/24/2005 EKRILEL 00000005 503260 · 10772071 310 Nofe 0000010 DAM: 503260 · 10772071 1 50:0558 · 855 00 00 Respectfully submitted,

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Daffer McDaniel, LLP P.O. Box 684908 Austin, Texas 78768-4908 (512) 476-1400 Date: February 17, 2005